

## **Amendments to the Claims:**

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

1. (Currently Amended) A substantially planar insulating panel comprising:
  - a rigid frame ~~having an open center and~~ defining a continuous periphery of the panel;
  - a first glass wall retained by the frame and a second glass wall spaced from and opposing the first wall and together with the first wall and the frame defining an enclosed internal space of the panel; and
  - at least one intermediate thermal plastic insulating wall disposed in the internal space spaced from and intermediate the first and second wall members to create a first enclosed space in the internal space between the intermediate insulating wall and the first wall and a second enclosed space in the internal space between the intermediate insulating wall and the second wall, wherein the intermediate insulating wall insulates the first wall from the second wall;
  - wherein the frame ~~has a uniform cross-sectional profile forming~~ forms a series of parallel, spaced apart mounting surfaces arranged about an inner periphery of the frame open center in a stepwise manner connected by ~~substantially perpendicular risers~~ an inner wall of the frame, the mounting surfaces receiving and retaining the walls thereon and arranged in a cascading series such that the areas of the walls diminish sequentially in one direction from one side of the panel to the other and the walls are sequentially spaced apart from each other, the parallel, spaced apart mounting surfaces enabling walls with sequentially larger areas to be inserted into the frame one after another, and the frame further includes at least one chamber formed therein containing desiccant moisture absorption material, the at least one chamber sealed from the first and second enclosed spaces except for perforations in the inner wall of the frame between the mounting surfaces to allow for the absorption of moisture from only an apposing enclosed space.
2. (Previously Presented) A panel according to claim 1 wherein the frame

is a unitary structure formed of a series of linear segments which are miter jointed to form a continuous profile having no mechanical start or end point.

3. (Original) A panel according to claim 2 wherein the miter joints in the frame are welded.

4.-6. (Canceled)

7. (Currently Amended) A panel according to claim [[6]] 1 in which the frame profile in section has cavities adapted to provide insulation.

8. (Original) A panel according to claim 7 in which the walls are affixed to the mounting surfaces using a rigid or semi-rigid adhesive which has either ultraviolet-setting or thermo-setting properties.

9. (Original) A panel according to claim 8 in which the mounting surfaces have one or more recesses which act as traps for any excess adhesive used in affixing the walls.

10. (Original) A panel according to claim 9 in which the first and/or second enclosed spaces are sealed and filled with air, argon gas, foam or another insulating material.

11. (Currently Amended) A panel according the claim [[10]] 1 in which the frame includes a gasket-retaining groove ~~adapted to retain~~ retaining a magnetized flexible sealing gasket which provides an airtight seal between the panel and an article to which the panel is fitted.

12. (Currently Amended) A panel according to claim [[11]] 1 in which the frame profile includes a keyway for insertion and mounting of a hinge.

13. (Previously Presented) A panel according to claim 1 in which the frame is formed from a thermal plastics material.

14. (Canceled)

15. (Currently Amended) A method for constructing a substantially planar insulating panel including a frame in which is disposed two walls defining an internal space; the internal space including at least one internal insulating wall which insulates the two outer walls thereby reducing or eliminating condensation on the outer walls of the frame; the method comprising the steps of:

[[a.]] (a) providing two glass walls of a predetermined size, a first, outer wall having an area smaller than a second, inner wall;

[[b.]] (b) providing [[an]] at least one thermal plastic insulating wall member having an area that is larger than the first wall and smaller than the second wall;

[[c.]] (c) ~~constructing a continuous peripheral frame~~ providing peripheral frame segments having a series of spaced mounting surfaces which receive and retain the walls and insulating wall member and a least one frame segment having at least one chamber with perforations in an inner wall of the frame between the mounting surfaces, the mounting surfaces arranged in a cascading series such that the areas of the walls diminish sequentially in one direction from one side of the panel to the other and the walls are sequentially spaced apart from each other;

(d) inserting a desiccant material into the at least one chamber;

(e) sealing the at least one chamber except for the perforations;

(f) attaching the peripheral frame segments together to form a continuous peripheral frame;

[[d.]] (g) fitting the first wall to an inner mounting surfaces of the frame;

[[e.]] (h) fitting the at least one insulating wall member to a second mounting surface on the frame in a central position relative to the outside surfaces of the frame; and

[[f.]] (i) fitting the second wall to a third mounting surface of the frame such that the glass walls are in opposing relationship and define ~~the~~ an internal space housing the insulating member.

16. (Original) A method according to claim 15 comprising the further step of placing the insulating wall member at an optimum spacing and equidistant from the first and second walls.

17. (Currently Amended) The method according to claim 15, wherein the mounting surfaces are parallel and spaced apart from each other and connected by ~~substantially perpendicular risers~~ an inner wall of the frame.

18. (Previously Presented) The method according to claim 15, wherein the frame comprises a series of linear segments miter jointed together to form the continuous peripheral frame prior to the fitting of the walls to their respective mounting surfaces.

19. (Canceled)

20. (Previously Presented) The method according to claim 15, wherein fitting the walls to their respective mounting surfaces comprises introducing an adhesive between the mounting surface and corresponding wall.

21. (New) A substantially planar insulating panel comprising:  
a frame defining a periphery of the panel;  
a first glass wall retained by the frame and a second glass wall opposing the first wall and together with the first wall and the frame defining an enclosed internal space of the panel;

at least one intermediate thermal plastic insulating wall disposed in the internal space intermediate the first and second walls and which creates a first enclosed space in the internal space between the insulating wall and the first wall and a second enclosed space in the internal space between the insulating wall and the second wall, wherein the

insulating wall insulates the first wall from the second wall;

the frame comprising an extruded profile;

the profile having a series of spaced mounting surfaces which receive and retain the walls thereon, the mounting surfaces arranged in a cascading series such that the areas of the walls diminish sequentially in one direction from one side of the panel to the other and the walls are sequentially spaced apart from each other, the profile further comprising at least one chamber formed therein containing desiccant moisture absorption material, the at least one chamber sealed from the first and second enclosed spaces except for perforations in an inner wall of the frame between the mounting surfaces to allow for the absorption of moisture from only an apposing enclosed space,

the cascading series of mounting surfaces also providing the frame with a multi-layered series of openings in the frame which progressively diminish in area in said one direction,

which series of openings in the frame enable a procession of progressively larger of said walls, during assembly of the panel, to be inserted one after the other each directly onto one after another of said cascading series of mounting surfaces.

22. A method for constructing a substantially planar insulating panel including a frame in which is disposed two outer walls defining an internal space therebetween; the internal space including at least one internal insulating wall which insulates the two outer walls thereby reducing or eliminating condensation on the outer walls of the frame; the method comprising the steps of:

- (a) providing two glass outer walls of a predetermined size;
- (b) providing at least one thermal plastic insulating wall;
- (c) constructing a frame from extruded frame segments having a series of spaced mounting surfaces which are adapted to receive and retain the walls, the mounting surfaces arranged in a cascading series such that, when the walls are in the frame, the areas of the walls diminish sequentially in one direction from one side of the panel to the other and the walls are sequentially spaced apart from each other, the cascading series of mounting surfaces also providing the frame with a multi-layered series of openings in the frame which

progressively diminish in area in said one direction, at least one of the frame segments having at least one chamber formed therein containing desiccant moisture absorption material, the at least one chamber sealed from the internal space except for perforations in an inner wall of the frame segment between the mounting surfaces to allow for the absorption of moisture from only an apposing enclosed space; and

(d) inserting through the openings in the frame a procession of progressively larger of said walls one after the other each directly onto one after another of said cascading series of mounting surfaces as follows:

(e) fitting the first outer wall to an inner mounting surface of the frame;

(f) fitting the insulating wall to a second mounting surface on the frame in a central position relative to the outside surfaces of the frame; and

(g) fitting the second outer wall to a third mounting surface of the frame such that the first and second outer walls are in opposing relationship and define the internal space that houses therein the at least one insulating wall.